



TRANSMISSION CORPORATION OF TELANGANA LIMITED

TELANGANA RECORDS HIGHEST EVER PEAK DEMAND OF 15752 MW ON 06.02.2025

POWER PURCHASES IN TELANGANA – A SAVING OF 1000 CRORES IN 13 MONTHS

- Telangana power utilities have met highest ever peak demand of 15752 MW on 06.02.2025. The previous highest demand met was 15623 MW on 08.03.2024.
- In the last fourteen months, all measures have been taken by the Government to ensure sustained and reliable supply of quality power to all categories of consumers including agriculture/industry/domestic.
- There has been a significant increase in demand when compared to earlier years. For example, in the recent months of December and January, the growth in peak demand met has been 13.49% and 10.10% respectively, when compared to the same months a year earlier. These are significant increases that, to be serviced, require careful planning of both purchase of power as well as its supply.

PEAK DEMAND MET (Fig in MW)				AVERAGE ENERGY SUPPLIED (Fig. in MU/day)			
Month	Last Year	This Year	% of Growth	Month	Last Year	This Year	% of Growth
Dec'24	12666	14375	13.49	Dec'24	207.68	235.25	13.28
Jan'25	13810	15205	10.10	Jan'25	243.12	260.56	7.17

- Given these trends, the distribution companies have taken steps to meet demand exceeding 17000 MW for the upcoming peak of the summer season.
- To meet this demand, the distribution companies (SPDCL, NPDCL) have planned to procure the power from existing long-term contracts as well as from the power exchanges.

- The rates for all power purchased from all the long term agreements are decided by the Regulatory Commission. Any shortage is met through purchases from Power Exchange, the working of which is as per the regulations of Central Electricity Regulatory Commission.
- The distribution companies purchase power from the exchanges not only to meet the short-term deficit, but also to reduce the power purchase cost through power purchase optimization.
- Power purchase is required because the base availability of power in the state(through long term contracted agreements) is 9134 MW, requiring the State to plan for market purchases during non-solar hours(in fact, also during solar hours, when the total solar power augmentation does not fill in the total gap with peak demand).
- This concept of power purchase optimization is explained below:
 - Whenever the rates in the exchange are less than the variable cost of thermal power plants, during certain period of the day it makes economic sense to purchase power from the market and back down the (at that moment) more expensive thermal power stations.
 - For example, in the recent months of December and January, the distribution companies have purchased power at an average rate of Rs.2.69/- and Rs.2.82/- per unit, backing down the thermal stations, the average rates for which were Rs.3.97/- per unit and Rs.4.18/- per unit. The saving that accrued to the distribution companies through their judicious choice of choosing to procure from the exchanges in particular time periods(when the exchange rates were low) has resulted in savings amount of Rs.196.68 crores in December and Rs.185.27 crores in January.
 - An example of power purchase cost optimization in some Time Blocks in two days is shown below :-

Date	Purchases from Power Exchanges			Average cost of purchase for cost optimization (Rs.per unit)	Average cost of Back down (Rs.per unit)	Savings in Crores
	Total Purchase (MU)	To meet Demand (MU)	For cost optimisation (MU)			
18.12.24	87.68	39.02	48.66	2.72	4.50	8.70
17.01.25	84.02	40.90	43.14	2.82	4.15	5.75

- In fact, from December 2023 to January 2025, the total savings that accrued to the distribution companies because of this optimization is Rs. 982.66 crores – that is, nearly a thousand crores. Had this amount not been saved, it would have, led to an additional burden upon the consumers of the State.
- In fact, this efficient usage of the exchange markets to optimize power purchase spending was recognized by the Government of India, which adjudged Telangana SLDC as the best in the country for large states. This award was presented on December 14th, in IIT Indore.

Chairman & Managing Director
TGTransco